

## MEMS demonstration board based on the LPY403AL (dual-axis pitch and yaw $\pm 30$ dps analog gyroscope)

Data brief

### Features

- Two working modes:
  - analog (AWM)
  - digital (DWM)
- RoHS compliant

### Description

The STEVAL-MKI104V1 is a demonstration board designed to provide the user with a complete, ready-to-use platform for demonstration of the LPY403AL product family.

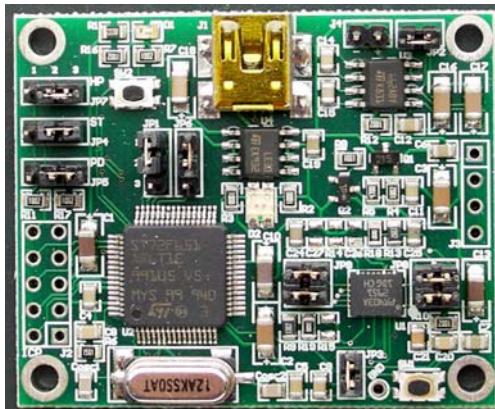
The kit includes a sensing element and an IC interface capable of translating information from the sensing element into a measured signal that can be used for external applications.

In addition to the MEMS sensor, the demonstration board uses an ST7 microcontroller which functions as a bridge between the sensor and the PC. This makes it possible to download the graphical user interface (GUI) from the website or to use dedicated software routines for customized applications.

The STEVAL-MKI104V1 demonstration board has been designed for use in two working modes: analog and digital.

In analog working mode (AWM) the microcontroller on the board is disabled and the analog outputs of the device are available to the user on a dedicated connector. This is the default working mode when the power supply is applied either through the USB connector or through the supply connector.

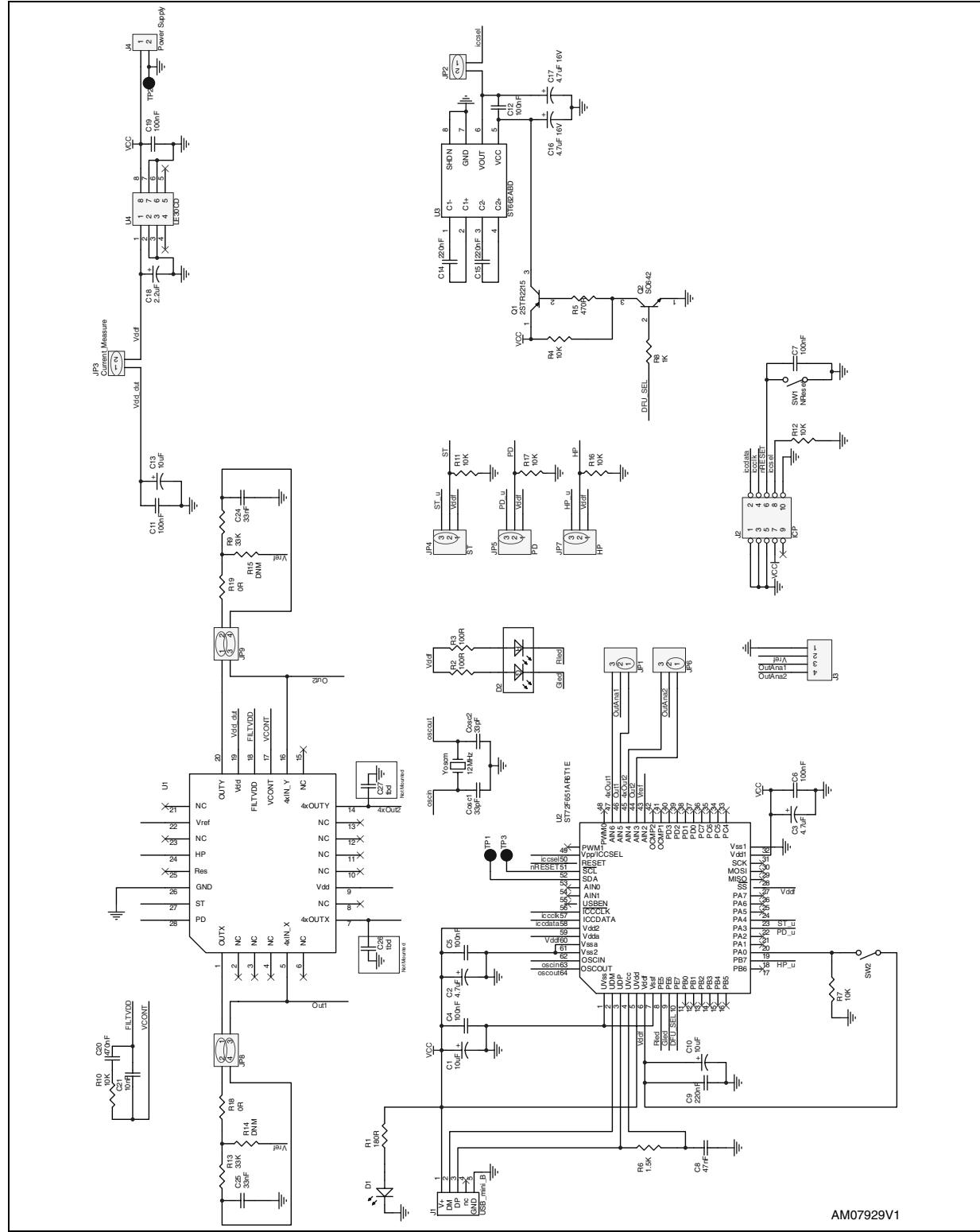
In digital working mode (DWM) the microcontroller on the board is enabled and it allows the user to digitally acquire the output signals of the device, to see them on the PC through the dedicated GUI, and to control the control pins of the device.



STEVAL-MKI104V1

## 1 Schematic diagram

**Figure 1.** STEVAL-MKI104V1 circuit schematic



## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
17-Aug-2010	1	Initial release.

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